

IN THE CLAIMS

Please cancel claims 1-7, amend claims 8, 10, and 11, and add claims 15-27 as follows:

1-7 (canceled).

8. (currently amended) A system for using a fluid composition to form a coating of a desired thickness on a surface of a workpiece, comprising:

- (a) a processing chamber;
- (b) a coating enclosure inside the processing chamber, wherein the workpiece is supported inside the coating enclosure during coating operations;
- (c) a pressure sensor positioned outside the coating enclosure;
- (d) a pressure communicative conduit operatively coupling the pressure sensor to the interior of the coating enclosure such that a pressure signal generated by the pressure sensor, at a time during which the workpiece is being rotated, is indicative of the barometric pressure inside the coating enclosure;
- (e) a control system operatively coupled to the pressure sensor and adapted to control at least one coating thickness parameter via an output control signal, wherein the control system comprises componentry enabling the control system to derive the output control signal from information comprising the generated pressure signal.

9. (original) The system of claim 8, further comprising a support surface positioned inside the coating enclosure on which the workpiece is rotatably supported.

10. (currently amended) The system of claim 9, wherein the at least one coating thickness parameter is selected from the group consisting of fluid composition temperature, spin speed of the workpiece, workpiece temperature, coating enclosure temperature, intra-station delay, acceleration of the workpiece, spin duration of the workpiece, and combinations thereof.

11. (currently amended) The system of claim 10, wherein the at least one coating thickness parameter comprises spin speed is selected from spin speed and process timing delay.

12. (original) The system of claim 8, wherein the pressure communicative conduit comprises a first end having an inlet positioned inside the coating enclosure and a second end operatively coupled to the pressure sensor.

13. (original) The system of claim 8, wherein the first end of the pressure communicative conduit comprises an elbow to inhibit egress of the fluid composition into the pressure communicative conduit.

14. (original) The system of claim 8, wherein the information used to derive the output signal further comprises a correlation between a coating thickness and the generated pressure signal.

15. (new) The system of claim 8 wherein the system comprises a spin coater.

16. (new) The system of claim 15 wherein the coating is a photoresist.

17. (new) A system for using a fluid composition to form a coating of a desired thickness on a surface of a workpiece, comprising:

- (a) a processing chamber;
- (b) a coating enclosure inside the processing chamber, wherein the workpiece is supported inside the coating enclosure during coating operations;
- (c) a pressure sensor positioned outside the coating enclosure;
- (d) a pressure communicative conduit operatively coupling the pressure sensor to the interior of the coating enclosure such that a pressure signal generated by the pressure sensor is indicative of the pressure inside the coating enclosure;
- (e) a control system operatively coupled to the pressure sensor and adapted to control at least one coating thickness parameter via an output control signal, wherein the control system comprises componentry enabling the control system to derive the output control signal from information comprising the generated pressure signal; and

(f) wherein the coating thickness parameter is selected from the group consisting of fluid composition temperature, workpiece temperature, coating enclosure temperature, spin speed of the workpiece, spin duration of the workpiece, a process timing delay, and combinations thereof.

18. (new) The system of claim 17, wherein the coating thickness parameter is the spin speed of the workpiece.

19. (new) The system of claim 17 wherein the coating thickness parameter is a process timing delay.

20. (new) The system of claim 17 wherein the coating is a photoresist.

21. (new) The system of claim 20 wherein the system comprises a spin coater, and wherein the pressure communicative conduit comprises a first end having an inlet positioned inside the coating enclosure and a second end operatively coupled to the exteriorly positioned pressure sensor, and wherein the inlet of the first end comprises a structure formed to inhibit ingress of the fluid composition into the pressure communicative conduit.

22. (new) The system of claim 21 wherein the workpiece comprises a semiconductor wafer.

23. (new) The system of claim 22 wherein the pressure signal is indicative of barometric pressure, at a time during which the workpiece is being rotated.

24. (new) A system for using a fluid composition to form a coating of a desired thickness on a surface of a workpiece, comprising:

- (a) a processing chamber;
- (b) a coating enclosure inside the processing chamber, wherein the workpiece is supported inside the coating enclosure during coating operations;
- (c) a pressure sensor positioned outside the coating enclosure;
- (d) a pressure communicative conduit operatively coupling the pressure sensor to the interior of the coating enclosure such that a pressure signal generated by the pressure sensor is indicative of the pressure inside the coating enclosure;

- (e) a control system operatively coupled to the pressure sensor and adapted to control at least one coating thickness parameter via an output control signal, wherein the control system comprises componentry enabling the control system to derive the output control signal from information comprising the generated pressure signal;
- (f) wherein the pressure communicative conduit comprises a first end having an inlet positioned inside the coating enclosure and a second end operatively coupled to the exteriorly positioned pressure sensor; and
- (g) wherein the inlet of the first end comprises a structure formed to inhibit ingress of the fluid composition into the pressure communicative conduit.

25. (new) The system of claim 24 wherein the first end of the pressure communicative conduit comprises an elbow to inhibit ingress of the fluid composition into the pressure communicative conduit.

26. (new) The system of claim 24 wherein the pressure signal is indicative of barometric pressure, at a time during which the workpiece is being rotated.

27. (new) The system of claim 26 wherein the system comprises a spin coater and the workpiece comprises a semiconducting wafer.